

Modular Training Standards

**Perform Trackless
Haulage – Operate Scoop
Tram-Remote Control**

Program #770010

Haulage Specialties Group
Module U0020

Perform Trackless Haulage – Operate Scoop Tram-Remote Control

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Haulage Specialties Group
Module U0020

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This document is the property of the trainee/
employee named inside and represents the official
record of his/her training.

**PERFORM TRACKLESS HAULAGE -
OPERATE SCOOP TRAM - REMOTE CONTROL**

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TRAINING UNIT

**TRAINING TITLE
UNIT**

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**AREAS OF
COMPETENCY**

**COMPETENCY ANALYSIS PROFILE
PERFORM TRACKLESS HAULAGE - OPERATE SCOOP TRAM - REMOTE
CONTROL
ON-THE-JOB TRAINING STANDARDS
-SKILLS-**

PERFORM TRACKLESS HAULAGE - OPERATE SCOOP TRAM - REMOTE CONTROL U0020.0	Identify and respond to workplace hazards 0020.01	Inspect and scale workplace 0020.02	Perform pre- operational checks on scoop tram 0020.03	Start up scoop tram 0020.04	Conduct operational checks on scoop tram 0020.05
	Perform pre- operational checks on scoop tram, in remote control mode 0020.06	Operate scoop tram in remote control mode 0020.07	Load muck, in remote control mode 0020.08	Haul muck, in remote control mode 0020.09	Dump muck, in remote control mode 0020.10
	Shut down scoop tram, in remote control mode 0020.11				



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PREFACE

This training document was developed by the Program Development and Standards Unit of the Ministry of Training, Colleges and Universities, in consultation with representatives from the Underground Hard Rock Mining industry. These Training Standards are intended to be used by trainee, trainers/instructors and companies as a "blueprint" for training or as a prerequisite for government accreditation/certification. While this training document is intended as guidelines for training, all issues might not apply in all operations.

A Basic Underground Hard Rock Miner (entry level) is a worker who has achieved accreditation in the entire Common Core Program # 770010. The Mining Tripartite Committee recommends that the employer must provide training in the entire common core for the Basic Underground Hard Rock Miner Training Program, to the worker, within the first year of employment. The prerequisite common core and specialty modules related to a specialty module must be taken before training in the specialty module, e.g Jumbo Drill *NOTE: To be trained and accredited in this module, the prerequisite modules from Program #770010 are U0000, U0001, U0002, U0004, U0006 and U0011. The other prerequisite modules, where applicable, are U0005, U0007, U0014, U0015 and U0082.* Employers have a responsibility to train workers for the work to be done.

The first three modules of Program #770010 - U0000, U0001 and U0002 are prerequisites to all other modules for the program. They must be completed before any other modules can be done and before the employee can be permitted to work underground.

Under the Occupational Health & Safety Act - R.R.O. 1990 Regulation 854, 11.3 there is an allowance for the recognition of equivalent training from other jurisdictions to Ontario training. Based on a comparison of the two programs, the Mining Tripartite Committee has deemed Quebec's Formation Modulaire du Travailleur Minier (FMTM) program to be equivalent to Ontario's Program #770010 Common Core except for specific mine orientation (U0000, Follow Surface and Underground Induction Procedures) and secondary blasting (U0006, Blast Rock). Employers should contact their local apprenticeship office for details about the requirements associated with these equivalencies.

New trainees or experienced miners must obtain accreditation in the same way. Each must demonstrate the skills specified in each Performance Objective to the described minimal acceptable standard as prescribed in each module. These demonstrations must be administered in an operating mine by a trainer designated by the company who shall follow the Performance Demonstration Guidelines approved by the Mining Tripartite Committee.

The care and maintenance of this book is the joint responsibility of the trainee and the employer. The Training Standards were developed specifically for documenting the trainee's acquisition of skills.

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PREFACE - Cont'd

Areas of the Basic Underground Hard Rock Common Core including mechanical staging, drilling, rock bolting, and mucking may infringe on some speciality modules for purposes of safety and technological changes. However, accreditation in these areas of the Common Core is not intended to replace accreditation in the speciality modules.

Throughout the document the term "including" is often used. "Including" means: one or more of the items listed, but not limited to those items included in the list.

N.B. Re: Lock out and /or tag, where it is practical or possible to lock, then locking and tagging should be the norm.

NOTICE/DECLARATION FOR COLLECTION OF PERSONAL INFORMATION

1. This information is collected under the authority of the Order-In-Council Number 701/85.
2. The information is collected for the purpose of administering this modular training program within the Province of Ontario.
3. Questions regarding collection and use of this information may be directed to:

Director of Apprenticeship
Workplace Training Branch
Ministry of Training, Colleges and Universities
900 Bay Street
17th Floor
Toronto, Ontario
M7A 1L2
(416) 326-5605

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IMPORTANT DIRECTIONS TO TRAINERS

Trainers instructing workers in the specialty modules for Program 770010 must meet the Trainer Qualification and Criteria Guidelines for Program #770010. They must be accredited in the Basic Common Core Underground Hard Rock program #770010 and the specialty module they will be instructing. Contact your local apprenticeship office for a copy of the Trainer Qualification and Criteria Guidelines.

The Training Standards identify skills required for this occupation and its related training program.

These Training Standards have been written in concise statements which describe how well a trainee must perform each skill in order to become competent.

In using these Training Standards, trainers will be able to ensure that the trainee is developing skills detailed for the occupation.

Trainers and trainees are required to sign off and date the skills following each successful acquisition.

Employers participating in this training program will be designated as the Signing Authority and are required to attest to successful achievement in the space provided at the end of each unit.

IMPORTANT DIRECTIONS TO THE TRAINEE

Trainee

1. It is the responsibility of the trainee to inform the local Apprenticeship Client Services office regarding the following changes:
 - change of trainee name or address;
 - transfer to a new employer;
2. Training Reports must be signed for modular trainees by a Ministry of Training, Colleges and Universities designated Signing Authority and forwarded to a local Apprenticeship Client Services office.
3. At the completion of training, the Trainee Completion Form must be completed and signed off by the Signing Authority and submitted to local Apprenticeship Client Services office.

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UNDERGROUND HARD ROCK MINING SPECIALITY MODULES LISTING BY GROUPS

GROUP 1 PRODUCTION SPECIALTIES

U0051 Perform Non-Mechanized Room and Pillar Mining
U0052 Perform Mechanized Room and Pillar Mining
U0053 Perform Shrinkage Mining
U0054 Perform Regular Cut and Fill Mining
U0055a Perform Mechanical Cut and Fill Mining-
 Non Captive Stope
U0055b Perform Mechanical Cut and Fill Mining-
 Captive Stope
U0056 Perform Square Set Mining
U0057 Perform Under Cut and Fill Mining
U0058 Perform Non-Mechanized Bulk Mining
U0059 Perform Mechanized Bulk Mining

GROUP 3 HAULAGE SPECIALTIES

U0015 Maintain Tire and Wheel Assemblies
U0017 Operate Scram Drift
U0019 Perform Track Haulage- Operate
 U/G haulage Train Remote Control
U0020 Perform Trackless-Haulage Operate
 Scoop Tram-Remote Control
U0023 Operate Front-End Loader
U0067 Perform Track Haulage- Operate
 U/G Haulage Train

GROUP 2 DEVELOPMENT SPECIALTIES

U0016 Perform Non Mobile-Trackless Drifting
U0060 Perform Mobile Drifting
U0061 Perform Non-Mobile Track Drifting
U0062 Perform Conventional Untimbered Raising
U0063 Perform Conventional Timbered Raising
U0064 Perform Mechanized Raising
U0065 Perform Drop/Inverse Raising Mechanized/NonMechanized
U0066a Perform Shaft Sinking- Timber Lining Installation
U0066b Perform Shaft Sinking- Concrete Lining Placement
U0066c Perform Shaft Mucking
U0066d Perform Shaft Drilling and Blasting

GROUP 4 DRILLING AND BLASTING SPECIALTIES

U0069 Operate Non-Mechanized Long Hole Drill
U0070 Operate In-The-Hole Drilling
U0072 Operate Raise Bore Drill
U0089 Operate Mechanized Jumbo Drill
U0090 Operate Mechanized Long Hole Drill
U0092 Perform Mobile Bulk Blasting
U0093 Perform Non-Mobile Bulk Blasting

**PERFORM TRACKLESS HAULAGE -
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GROUP 3 HAULAGE SPECIALTIES - cont'd

U0068a Perform Trackless Haulage-Operate Scoop Tram Draw Point
U0068b Perform Trackless Haulage-Operate Scoop Tram Production/Development
U0091 Operate Haulage Truck

GROUP 5 GENERAL SERVICES

U0013 Operate Lifting Mechanism(s)
U0014 Operate Forklift
U0018 Operate Mechanized Rock Bolter
U0021 Operate Bulldozer
U0022 Operate Grader
U0024 Operate Utility Vehicle
U0025 Operate Mechanized Muck Conditioner
U0026 Operate Mechanized Cable Bolter
U0027 Operate Non-Mechanized Cable Bolter
U0028 Operate Scissor Lift
U0029 Operate Rock Breaker
U0033 Operate Oxyacetylene Cutting Equipment
U0035 Operate Backhoe
U0036 Operate Overhead Crane
U0074 Operate Mine Hoist- Friction or Drum
U0075 Install and Maintain Track System
U0076 Perform Fill Placement
U0077 Operate Underground Crusher
U0078 Operate Underground (Filter) Decantation System
U0079 Operate Conveyor
U0080 Install and Maintain Underground Pipe System
U0081 Operate Tipple
U0082 Install and Maintain Underground Ventilation Equipment

GROUP 6 SHAFT SERVICES

U0083 Operate Cage
U0084 Perform Shaft Maintenance
U0088 Operate Skip

GROUP 7 CONSTRUCTION SERVICES

U0085a Construct Concrete Installations
U0085b Construct Timber Installations
U0085c Construct Steel Installations
U0086 Perform Shotcreting

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TRAINEE COMPLETION FORM

Trainee Name _____
Print

Signature
Social Insurance Number _____

The Training Unit, when completed, should be signed off by Trainer/ Signing Authority below. Submit required documentation to your local Apprenticeship Client Services office. Any supporting documentation should also be attached.

Employer Name: _____
Address: _____
Telephone: _____
Signing Authority: _____
Signature

TRAINING UNIT COMPLETION FORM

**TRAINING TITLE
UNIT**

SIGNING AUTHORITY

U0020.0 Perform Trackless Haulage – Operate
Scoop Tram - Remote Control

**PERFORM TRACKLESS HAULAGE -
OPERATE SCOOP TRAM - REMOTE CONTROL**

**U0020.0 PERFORM TRACKLESS HAULAGE - OPERATE SCOOP TRAM -
REMOTE CONTROL**

GENERAL PERFORMANCE OBJECTIVE

Operate scoop tram using remote control, to load, haul and dump muck, by identifying and responding to workplace hazards; inspecting and scaling workplace; performing pre-operational checks on scoop tram; starting up scoop tram; conducting operational checks on scoop tram; performing pre-operational checks on scoop tram in remote control mode; operating scoop tram in remote control mode; loading, hauling and dumping muck in remote control mode; and shutting down scoop tram in remote control mode according to government legislation, company standards and manufacturer specification.

NOTE: To be trained and accredited in this module, the prerequisite modules from Program #770010 are U0000, U0001, U0002, U0006, U0010 and U0068a. The other prerequisite modules, where applicable, are U0011 and U0015.

PERFORMANCE OBJECTIVES

Trainer's Name (Print)

Trainee's Name (Print)

SKILLS

0020.01 Identify and respond to workplace hazards, including: ground conditions, ventilation, open holes above/ below, and housekeeping, by isolating area; and repairing and/or reporting deficiencies according to government legislation and

Date Completed

Trainer's Signature

Trainee's Signature

**PERFORM TRACKLESS HAULAGE -
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**U0020.0 PERFORM TRACKLESS HAULAGE - OPERATE SCOOP TRAM -
REMOTE CONTROL - Cont'd**

- 0020.02 Inspect and scale workplace, by selecting scaling bar for the specific job based on type, size and condition; fastening and connecting hoses; washing down area; setting water flow to control dust; performing scaling procedures; checking ventilation flow; and taking corrective action and/or reporting according to government legislation, company standards and manufacturer specifications.

Date Completed

Trainer's Signature

Trainee's Signature

- 0020.03 Perform pre-operational checks on scoop tram, by testing power source; checking fluid levels; following refueling and lubricating procedures; inspecting principle components, including: chassis, canopy, engine/power source, power train, controls, bucket, wheel chocks, cylinders, trailing cables, lighting, warning and communication systems, belts; using fall protection, including: fall arrest or travel restraint systems; visually inspecting fire extinguishers and fire suppression systems and nozzles; checking pins; inspecting tire and wheel assemblies; inspecting/testing braking systems; using 3 point contact while mounting and dismounting; locking out and/or tagging; and repairing and/or reporting deficiencies according to government legislation, company standards and manufacturer specifications.

Date Completed

Trainer's Signature

Trainee's Signature

- 0020.04 Start up scoop tram, by activating power source; using audible warning systems; observing equipment operation and gauges; checking for clearances and activity in area; locking out and/or tagging; and repairing and/or reporting deficiencies according to government legislation, company standards and manufacturer specifications.

Date Completed

Trainer's Signature

Trainee's Signature

**PERFORM TRACKLESS HAULAGE -
OPERATE SCOOP TRAM - REMOTE CONTROL**

**U0020.0 PERFORM TRACKLESS HAULAGE - OPERATE SCOOP TRAM -
REMOTE CONTROL - Cont'd**

- 0020.05 Conduct operational checks on scoop tram, by monitoring gauges and meters, including: lights, warning and communication systems, transmission and torque pressure; listening for unusual noises in engine/power train; inspecting steering; testing brakes; raising and lowering bucket; checking exhaust system for leaks and excessive smoke; locking out and/or tagging; and repairing and/or reporting deficiencies according to government legislation, company standards and manufacturer specifications.

Date Completed

Trainer's Signature

Trainee's Signature

- 0020.06 Perform pre-operational checks on scoop tram, in remote control mode, with engine running, by working from a safe location; activating power supply; switching to remote control mode; activating transmitter; selecting gear; ensuring switches are operational, including: directional controls, warning, safety, lighting and communication systems; checking cameras; checking bucket functions; ensuring required lighting and ventilation; noting direction of ventilation flow and position of ventilation/fire doors; inspecting/testing braking systems; listening for unusual noises; noting limitations /range of remote control; locking out and/or tagging; and repairing and/or reporting deficiencies according to government legislation, company standards and manufacturer specifications.

Date Completed

Trainer's Signature

Trainee's Signature

- 0020.07 Operate scoop tram in remote control mode, by ensuring clearances and clear machine path; working from a safe location; working within the limitations of remote control; complying with speed limits, traffic signs and signals; adjusting speed to conditions; watching for pedestrian traffic; following designated travel route; raising, tilting and lowering bucket; using personal protective equipment; using fall protection, including: fall arrest or travel restraint systems; posting signs or lights; ensuring required ventilation; noting direction of ventilation flow and position of ventilation/fire doors; ensuring required lighting; locking out and/or tagging; and repairing and /or reporting deficiencies according to government legislation, company standards and manufacturer specifications.

Date Completed

Trainer's Signature

Trainee's Signature

**PERFORM TRACKLESS HAULAGE -
OPERATE SCOOP TRAM - REMOTE CONTROL**

**U0020.0 PERFORM TRACKLESS HAULAGE - OPERATE SCOOP TRAM -
REMOTE CONTROL - Cont'd**

0020.08 Load muck, in remote control mode, by working from a safe location; positioning vehicle; moving vehicle within its limitations; selecting gear; loading bucket within its limitations; ensuring bucket clearance; ensuring required ventilation, ventilation, lighting and clear path for machine movement; noting direction of ventilation flow and position of ventilation/fire doors; locking out and/or tagging; and repairing and/or reporting deficiencies according to government legislation and company standards and manufacturer specifications.

Date Completed

Trainer's Signature

Trainee's Signature

0020.09 Haul muck, in remote control mode, with bucket positioned, by complying with speed limit, traffic signs and signals; adjusting speed to conditions; watching for pedestrian traffic; maintaining road ways; ensuring required ventilation; noting direction of ventilation flow and position of ventilation/fire doors; ensuring required lighting; locking out and/or tagging; and repairing and /or reporting deficiencies according to government legislation and company standards, and manufacturer specifications.

Date Completed

Trainer's Signature

Trainee's Signature

0020.10 Dump muck, in remote control mode, by positioning vehicle for dump; ensuring bucket clearance; maintaining dump area, including: bumper block/stop block; positioning bucket for travel; locking out and/or tagging; and repairing and/or reporting deficiencies according to government legislation, company standards and manufacturer specifications.

Date Completed

Trainer's Signature

Trainee's Signature

**PERFORM TRACKLESS HAULAGE -
OPERATE SCOOP TRAM - REMOTE CONTROL**

**U0020.0 PERFORM TRACKLESS HAULAGE - OPERATE SCOOP TRAM -
REMOTE CONTROL - Cont'd**

0020.11 Shut down scoop tram, in remote control mode by turning off receiver and transmitter; switching from remote to manual mode; parking scoop tram in designated/approved area; storing remote control transmitter in designated/approved area; lowering bucket; turning bucket to wall on ramps; setting park brakes; shutting off power supply; setting wheel chocks; performing post-operational checks; protecting equipment; storing equipment in designated/approved area; completing operator report; locking out and/or tagging; and repairing and/or reporting deficiencies according to government legislation, company standards and manufacturer specifications.

Date Completed

Trainer's Signature

Trainee's Signature

Employer's Name

Employer's Signature

